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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,964	11/25/2003	Mabrouk Ouederni	2000-16 CIP-2	4353

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EXAMINER

YAO, SAMCHUAN CUA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 03/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/721,964	<b>Applicant(s)</b> OUEDERNI ET AL.	
	<b>Examiner</b> Sam Chuan C. Yao	<b>Art Unit</b> 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kwok (US 5,023,131) in view of Huard et al (US 6,517,848) or Weisman et al (US 4,610,678) and Dean et al (US 6,231,976).

With respect to claim 1, Kwok discloses a single layer fibrous batt (abstract). The batt comprises staple cotton fibers (taken to be the recited absorbent material in claim 1), co-polyester type binding fibers, hollow synthetic fibers, etc. (col. 2 lines 6-68; col. 3 lines 25-27). While Kwok teaches the batt as being useful for making a "*padding*" (col. 3 lines 53-56), and also discloses related prior art absorbent pads (col. 1 lines 21-47) and while Kwok also teaches a cotton embraces "*wood pulp*" and "*regenerated cellulose*" and also discloses that "... *for any reason, other fibers can be added to the blend and the other fibers can perform an active function or can merely be present as a filler material.*" (col. 2 lines 16-57), Kwok is silent whether the wood pulp is a wood pulp fluff. However, such would have been obvious in the art as such is a notoriously well known absorbent fibrous

material in the art of making an absorbent non-woven web as exemplified in the teachings of Huard et al (col. 9 lines 1-13).

While the recited claims require an air-laid web, it would appear that this limitation fails to positively define over a carded fiber web of Kwok, especially if the web is subjected to a carding operation, which includes a randomizer. In any event, it would have been obvious in the art, because it is conventional in the art to form an absorbent blended fibrous batt using an air-laying operation as exemplified in the teachings of Huard et al (col. 9 lines 1-67) or Weisman et al (abstract; figure).

Kwok is silent on whether the co-polyester type binder fibers is mono-component or bi-component binder fibers. In any event, it would have been obvious in the art to use co-polyester bi-component binder fibers in the process of Kwok, because Dean, drawn to making fiber webs which are suitable in a number of applications such as diaper making, discloses interchangeably using monocomponent binder fiber, bi-component binder fiber, or multi-component binder fiber (abstract; col. 12 lines 47-67).

With respect to claim 2, Kwok teaches "... *active fibers which perform an active function [in this case, promoting fluid retention under loading conditions for a given weight] in the blends, the amount of fibers should be chosen to accomplish the desired purpose.*" (phrase inserted; col. 2 lines 65-68). Moreover, one in the art would have determined, by routine experimentation, a suitable amount of hollow fibers to achieved the desired purpose. Furthermore, the recited amount

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of hollow fibers is old in the art. Absent any showing of unexpected benefit, it would have been obvious in the art to incorporate hollow fibers in an absorbent pad of Kwok in the amount recited in this claim.

With respect to claims 2-5, PET hollow fibers and hollow fibers with a denier range of 2-18 are well known in the art.

With respect to claim 6, see column 1 lines 56-62 and column 2 lines 6-31 of the Kwok patent.

With respect to claim 7, the various bi-component binder fibers recited in this claim are conventional in the art. It would have been obvious in the art to substitute bicomponent binder fibers suggested by Kwok with another well known bi-component binder fibers in the art.

With respect to claims 8-11, see column 1 lines 56-62, column 2 lines 15-57 of the Kwok patent.

With respect to claims 12-13, the recited SAPs are well known in the art as exemplified in the teachings of Weisman et al (abstract, col. 4 lines 32-52, and figure). It would have been obvious in the art to incorporate anyone of SAPs or a combination thereof recited in claim 13 in making an absorbent pad suggested by Kwok in order to enhance the fluid absorbency for a given weight of the pad.

With respect to claim 14, see column 1 lines 21-47 of the Kwok patent, Weisman et al (abstract; figure) or Huard et al (figures 1-2).

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3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (H1732) in view of Barge et al (US 5,989,688), Seal (US 5,041,104), and optionally further in view of JP 1-260051 A.

Johnson discloses an air-felt unitary absorbent core (24), the absorbent core comprises various blend of thermoplastic binder fibers, absorbent materials such as comminuted wood pulp, creped cellulose wadding, cross-linked cellulosic fibers, SAP, peat moss, etc. (col. 6 line 57 to col. 7 line 36; col. 13 line 4-7; figure 2).

Johnson does not teach using hollow synthetic fibers. However, such would have been obvious in the art, because a) Seal, drawn to making an absorbent web, teaches using polyester hollow fibers to enhance a loft/bulk characteristic of a fiber web (col. 3 lines 48-51); and b) it is old in the art to form an absorbent padding comprising hollow synthetic fibers, bi-component fibers, and various absorbent materials as exemplified in the teachings of Kwok (col. 1 lines 21-47; col. 2 lines 6-68). Optionally, JP '051 teaches forming an absorbent fibrous web from bi-component hollow fibers to enhance "stability and compression elasticity", to improve "bulkiness and air permeability", and also to increase "absorptivity" (English abstract).

Johnson is silent on whether the thermoplastic binder fibers are monocomponent fibers or bi-component fibers. However, it would have been obvious in the art to form an absorbent core of Johnson where bi-component binder fibers are used, because it is old in the art to form an absorbent article comprising mono-

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component fibers or bi-component fibers and hollow fibers as exemplified in the teachings of Barge et al (abstract; col. 1 lines 9-12; col. 5 line 64 to col. 6 line 59; col. 7 lines 51-64; examples 1-9).

With respect to claims 2-14, these claims would have been obvious in the art for essentially the same line of reasoning set forth in the immediately preceeding numbered paragraph.

### ***Response to Arguments***

4. Applicant's arguments filed on 03-21-06 have been fully considered but they are not persuasive.

On page 5, Counsel argued that Kwok, by implication, is not directed to forming a fibrous absorbent article. Counsel's attention is directed to column 1 lines 21-35 of Kwok, where prior art fibrous absorbent articles are disclosed. One in the art reading Kwok as a whole, in light of at least these passages, would have reasonably understood and appreciated that the process of Kwok can effectively be applied to manufacture a fibrous absorbent pad/padding.

As for Counsel's arguments that Kwok does not use bi-component fibers, such is moot in light of a new ground of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571)

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272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richard Crispino can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sam Chuan C. Yao  
Primary Examiner  
Art Unit 1733

Scy  
02-06-06